SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Jokisch Fotia Alea 2.K

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Parting agent.

1.3. Details of the supplier of the safety data sheet

Company name:	JOKOBA Technologies GmbH Germany
Street:	Industriestraße 5
Place:	D-33813 Oerlinghausen
Telephone:	+49(0)5202/9734-0
E-mail:	info@jokoba.de
Contact person:	Regulatory affairs
E-mail:	MSDS@jokoba.de
Internet:	www.jokisch-fluids.de

1.4. Emergency telephone number: Emergency telephone number (24h) +1 872 5888271 (JRR) (en)

Further Information

Reserved for industrial and professional use.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Aerosol 3; H229

Full text of hazard statements: see SECTION 16.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.
Keep out of reach of children.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word: Warning

Hazard statements

H229	Pressurised container: May burst if heated.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Special labelling

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

2.3. Other hazards

Dispose of contents/container to industrial incineration plant.
Avoid release to the environment.
The components in this formulation do not meet the criteria for classification as PBT or vPvB .

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

none (according to Regulation (EC) No 1907/2006 (REACH))

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. Move victim to fresh air. Put victim at rest and keep warm.

After contact with skin

After contact with skin, wash immediately with: Water. Change contaminated clothing. Seek medical attention if problems persist.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Move victim to fresh air. Put victim at rest and keep warm.
In case of respiratory tract irritation, consult a physician.
Rinse mouth thoroughly with water.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product itself does not burn.
Water fog. Extinguishing powder. Carbon dioxide. Foam.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Heating causes rise in pressure with risk of bursting.
In case of fire may be liberated:
Carbon dioxide (CO2).
Carbon monoxide
Nitrogen oxides (NOx).

5.3. Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings.
Do not inhale explosion and combustion gases. Wear a self-contained breathing apparatus and chemical protective clothing.
Move undamaged containers from immediate hazard area if it can be done safely.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Avoid contact with skin.
Avoid contact with eyes.
Wear personal protection equipment. Do not breathe gas/fumes/vapour/spray.

For non-emergency personnel

Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Suitable material for taking up: Sand, Universal binding agent. Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Disposal: see section 13
See section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas.
When using do not eat, drink or smoke.
If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Handle and open container with care. Flammable vapours can accumulate in steam space of closed systems. Keep away from sources of ignition - No smoking. Only use the material in places where open light, fire and other flammable sources can be kept away. Do not spray on naked flames or any incandescent material.

Advice on protection against fire and explosion

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

Advice on general occupational hygiene

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Further information on handling

High slip hazard because of leaking or spilled product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.
Recommended storage temperature: 5-40 °C
Do not store at temperatures over: 40 °C
Maximum period of storage (time): 2 years

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Recommended storage temperature: 5-40 °C
Do not store at temperatures over: 40 °C

7.3. Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
111-42-2	Diethanolamine (Inhalable Fraction and Vapour)	0.2	1		TWA (8 h)	
57-55-6	Propane-1,2-diol, particulates	-	10		TWA (8 h)	
102-71-6	Triethanolamine	-	5		TWA (8 h)	

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
102-71-6	Triethanolamin		
Worker DNEL, long-term	inhalation	local	1 mg/m³
Worker DNEL, long-term	dermal	systemic	7,5 mg/kg bw/day
Consumer DNEL, long-term	inhalation	local	0,4 mg/m³
Consumer DNEL, long-term	dermal	local	2,66 mg/person/day
Consumer DNEL, long-term	oral	systemic	3,3 mg/kg bw/day
57-55-6	1,2-propylene glycol (1,2-propanediol)1,2-propylene glycol (1,2-propanediol)		
Worker DNEL, long-term	inhalation	systemic	168 mg/m³
Consumer DNEL, long-term	oral	systemic	85 mg/kg bw/day
Consumer DNEL, long-term	dermal	systemic	213 mg/kg bw/day
Worker DNEL, long-term	inhalation	local	10 mg/m³
Consumer DNEL, long-term	inhalation	systemic	50 mg/m³
111-42-2	2,2'-iminodiethanol; diethanolamine		
Worker DNEL, long-term	inhalation	systemic	0,75 mg/m³
Consumer DNEL, long-term	inhalation	systemic	0,125 mg/m³
Worker DNEL, long-term	inhalation	local	0,5 mg/m³
Consumer DNEL, long-term	inhalation	local	0,125 mg/m³
Worker DNEL, long-term	dermal	systemic	0,130 mg/kg bw/day
Consumer DNEL, long-term	dermal	systemic	0,07 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,06 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
102-71-6	Triethanolamin
Freshwater	0,32 mg/l
Marine water	0,32 mg/l
Freshwater sediment	1,7 mg/kg
Marine sediment	0,17 mg/kg
Microorganisms in sewage treatment plants (STP)	10 mg/l
Soil	0,151 mg/kg
57-55-6	1,2-propylene glycol (1,2-propanediol)1,2-propylene glycol (1,2-propanediol)
Freshwater	260 mg/l
Marine water	26 mg/l
Freshwater sediment	572 mg/kg
Marine sediment	57,2 mg/kg
Soil	50 mg/kg
111-42-2	2,2'-iminodiethanol; diethanolamine
Freshwater	0,021 mg/l
Marine water	0,002 mg/l
Freshwater sediment	0,092 mg/kg
Marine sediment	0,0092 mg/kg
Soil	1,63 mg/kg

8.2. Exposure controls



Individual protection measures, such as personal protective equipment

Hand protection

Protect skin by using skin protective cream.
Wash hands before breaks and after work.
Gloves of appropriate material (i.e. nitrilic rubber, specification: penetration time: level 6, >480 min., thickness 0,9-1 mm; CE-certified acc. EN 374 cat III)

Skin protection

Only wear fitting, comfortable and clean protective clothing. Chemical resistant safety shoes. Take off immediately all contaminated clothing.
Thorough skin-cleansing after handling the product. Set out skin protection guidelines.

Respiratory protection

Do not breathe gas/fumes/vapour/spray. With correct and proper use, and under normal conditions, breathing protection is not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	red
Odour:	characteristic

		Test method
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	100 °C	
pH-Value:	9,5	
Viscosity / kinematic: (at 20 °C)	214 mm²/s	ASTM D 445
Density (at 20 °C):	1,02 g/cm³	

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Danger of bursting container. In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Other safety characteristics

Solvent content: 0%

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Danger of bursting container.

10.4. Conditions to avoid

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Danger of bursting container.

10.5. Incompatible materials

The following must be prevented: Oxidizing agents, strong. acid.

10.6. Hazardous decomposition products

In case of fire may be liberated: Pyrolysis products, toxic.

Further information

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Endocrine disrupting properties

Based on available data, the classification criteria are not met.
This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.
According to the present state of knowledge negative ecological effects are not expected.

12.2. Persistence and degradability

No further relevant information available.

12.3. Bioaccumulative potential

No further relevant information available.

12.4. Mobility in soil

in delivery condition: liquid

12.5. Results of PBT and vPvB assessment

Based on available data, the classification criteria are not met.
The components in this formulation do not meet the criteria for classification as PBT or vPvB .

12.6. Endocrine disrupting properties

Based on available data, the classification criteria are not met.

12.7. Other adverse effects

Avoid release to the environment. According to the present state of knowledge negative ecological effects are not expected.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.
Completely emptied packings can be re-cycled. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - used product

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

Contaminated packaging

Water (with cleaning agent).

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
Hazard label:	2.2



Classification code:	5A
Special Provisions:	190+327+344+625
Limited quantity:	LQ2
Excepted quantity:	E0
Transport category:	3
Tunnel restriction code:	E

Other applicable information (land transport)

Special provisions: 190 625

Special provisions: CV9 CV12 V14 MP 9 PP87 RR 6 L2

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
Hazard label:	2.2



Classification code:	5A
Limited quantity:	LQ2
Excepted quantity:	E0

Other applicable information (inland waterways transport)

Special provisions: 190 327 625

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2, see SP63
Limited quantity:	See SP277
EmS:	F-D, S-U

Other applicable information (marine transport)

Special provisions: 63, 190, 277, 327, 959

E0

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS, non-flammable
14.3. Transport hazard class(es):	2.2
14.4. Packing group:	-
Hazard label:	2.2



Special Provisions:	A98 A145 A167 A802
Limited quantity Passenger:	30 kg G
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

Other applicable information (air transport)

E0

: Y203

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Personal protection equipment: see section 8

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Directive 2010/75/EU on industrial emissions:	0,955 % (9,741 g/l)
Directive 2004/42/EC on VOC in paints and varnishes:	1,123 % (11,455 g/l)

Additional information

According to EC directives or the corresponding national regulations the product does not have to be labelled.

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water hazard class (D):	1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,4,5,6,7,8,9,10,11,12,13,14,15,16.

AICS (Australien), DSL (Kanada), IECSC (China), REACH (Europäische Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (Neuseeland), PICCS (Philippinen), TSCA (USA)

Abbreviations and acronyms

Aerosol 3: Aerosols, hazard category 3
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Aerosol 3; H229	On basis of test data

Relevant H and EUH statements (number and full text)

H229 Pressurised container: May burst if heated.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)